

Notice of Allowability

Application No.

09/704,916

Applicant(s)

ROBINSON ET AL.

Examiner

Michael C. Heck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 08 August 2005.
2. ☒ The allowed claim(s) is/are 1-72.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Susanna Diaz
SUSANNA M. DIAZ
PRIMARY EXAMINER

AU3623

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

On Figure 15 of the Amendment to the Drawings filed 08 August 2005, insert --
Replacement Sheet -- at the top of the Figure.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael C. Heck whose telephone number is (571) 272-6730. The Examiner can normally be reached Monday thru Friday between the hours of 8:30am - 4:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq R. Hafiz can be reached on (571) 273-6729.

Any response to this action should be mailed to:

**Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Or faxed to:

(571) 273-8300

[Official communications; including After Final communications labeled "**Box AF**"]

(571) 273-6730

[Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

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13 October 2005

Response to Amendment

1. The objection to the drawings in the last Office Action has been overcome by the applicant's amendment to the drawings and specification.
2. The objection to the specification in the last Office Action has been overcome by the applicant's amendment to the specification.

REASONS FOR ALLOWANCE

3. Claims 1-72 are allowed.
4. The following is an examiner's statement of reasons for allowance:

The present invention of claims 1 and 31 disclose a method and system for employing a flexible interface of a client program interconnected to a client server to access the functionality of a workflow management system operably networked to a workflow server, the functionality including a set of predefined process templates defining a set of tasks and being capable of monitoring workflow, assigning tasks to users, and allowing users to initiate instances of a process from one of the set of predefined process templates. The method and system comprise steps for configuring a set of predefined protocol user interface pages comprising at least one control page with said predefined protocol having at least one server-side script embedded therein; pointing at least one first workflow platform-dependent object to access the workflow functionality, wherein the at least one first workflow platform-dependent object is customized for the workflow management system; interfacing at least one second workflow platform independent object with the at least one first workflow platform

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dependent object, wherein the at least one second workflow platform independent object is configured to provide input data received from the client server to the at least one first workflow platform dependent object and to receive output data provided by the workflow management system from the at least one first workflow platform dependent object; and calling at least one server program with the at least one control page which thereby invokes at least one of the first workflow platform-dependent object and the at least one second workflow platform-independent object; wherein, when the functionality of the workflow management system is to be accessed via the set of predefined protocol user interface pages, the at least one control page calls the at least one server program which, in turn, invokes at least one of the first and second objects to promote data translation and exchange between the client program and the workflow management system.

The closest prior art, Brandt et al. (U.S. Patent 5,892,905) teach an interface components mechanism that uses HTML variables and templates. A user performs an action that causes the web browser to request access to a software application via the WWW by inputting data to a web server application. The input data comprises an URL or other address data that specifies the location of a HTML template. The HTML templates include input variables that are used to pass data between the web browser and the software application. Brandt et al. further teach FlowMark as a popular process engineering tool that allows a relatively complex project or task to be broken down into a series of smaller processes or tasks. Information is processed by the FlowMark workflow software and usually involves multiple related activities. The

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Internet/application gateway includes a Common Gateway Interface (CGI), a FlowMark/Internet Gateway (FMIG), and WWW Application Program Interfaces (APIs). The user who needs to access a FlowMark application over the WWW will input a request to a web browser using a client workstation. The user can enter a URL for a specific home page site or click on a button presented in an HTML-generated user interface using the web browser. When the user "submits" the requested information, usually by clicking on a button on an HTML form, a web server application receives the input data from the web browser. After receiving the data from the web browser, the CGI parses the data to locate relevant information about the requested processes, including the request for access to FlowMark. The CGI sends the user data and requests to the FMIG along with some control information. The FMIG provides a way for FlowMark applications to interact with a web user over the WWW. The FMIG directs the flow of information between the CGI and the FlowMark application and initiates FlowMark functions by using FlowMark APIs. A user who needs to access a FlowMark application over the WWW will input a request to a web browser using a client workstation. FlowMark is a workflow application. Brandt et al. and the prior art of record fail to teach or suggest pointing at least one first workflow platform-dependent object to access the workflow functionality, wherein the at least one first workflow platform-dependent object is customized for the workflow management system, and interfacing at least one second workflow platform-independent object with the at least one first workflow platform dependent object, wherein the at least one second workflow platform independent object is configured to provide input data received from the client

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server to the at least one first workflow platform dependent object and to receive output data provided by the workflow management system from the at least one first workflow platform dependent object. Brandt et al. in combination with Clicks, Jr. et al. (U.S. Patent 6,523,570) teach porting software between different computing platforms. A platform specific compiler includes platform dependent compiler object code and platform independent compiler object code, which are suitable for execution on a particular hardware platform. An interface that is partially embedded in the platform independent object code and partially embedded in the platform dependent object code mediates flow of information between the platform independent compiler code and the platform dependent compiler object code during platform specific compiler run time. During run time (execution), the platform independent compiler object code interacts with the platform dependent compiler object code to operate (i.e., compiler) in a target dependent manner. Brandt et al. in combination with Clicks, Jr. et al. and the prior art of record fail to teach or suggest a second platform independent object being configured to provide input received from a client server to at least one first workflow platform dependent object.

The invention of claim 65 discloses a method for organizing and locating and navigating users within a flexible interface of a client program interconnected to a client server having a predefined interface root directory path to access the functionality of a workflow management system operably networked to a workflow server, the functionality including a set of predefined process templates each having a unique process identifier and defining a set of tasks and being capable of monitoring workflow,

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assigning tasks to users each having a unique task identifier, and allowing users to initiate instances of a process from one of the set of predefined process templates. The method comprises creating at least one predefined protocol process activity page relating to a process and named for the unique process identifier, wherein the process corresponds with a function of the workflow management system and defines one or more tasks, the workflow management system being configured to assign the tasks to users and to monitor work performed on the tasks; locating the at least one predefined protocol process activity page in the predefined interface root directory path; creating a process directory beneath the predefined interface root directory path for the process and named for the unique identifier thereof; creating at least one predefined notifications view control page within the created process directory in a predetermined protocol relating to a task assignable within the process and named for the task unique identifier if the task requires completion by a designated deadlines the at least one predefined notification view control page being configured to be issued when the task is not completed by the designated deadline; locating the at least one predefined notifications view control page in the created directory within the predefined interface root directory path; creating at least one predefined protocol user interface page within the created process directory in a predetermined protocol relating to a task assignable within the process and named for the task unique identifier if the process requires input on any of its assignable activities; locating the at least one predefined protocol user interface page in the created directory within the predefined interface root directory path; and whereby the predefined protocol process activity page can be automatically located by the

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interface within the predefined interface root directory path of the client server by only knowing the process unique identifier and the at least one predefined protocol user interface page can be located in the created directory within the predefined interface root directory path by knowing only the task unique identifier.

The closest prior art, Brandt et al. (U.S. Patent 5,892,905) teach that when a web server application that is running on a web server computer receives a web page request from a web browser, it will build a web page in HTML or retrieve a file containing a pre-built web page and send it across a connection to the requesting browser. Some web pages are designed to elicit input from a web browser. FMIG provides a way for the FlowMark application to interact with a web user over the WWW. FMIG directs the flow of information between the CGI and the FlowMark application and initiates FlowMark functions by using FlowMark APIs. For example, the FMIG may invoke a FlowMark API to create a process instance necessary to process the request submitted by the user. Then, using a different FlowMark API, the FMIG can invoke or start this process instance. Referring to the Car Rental Example, the person or user who wants to rent a car will access the WWW by using a client workstation, which is running a web browser. The user will enter the URL for the rental car agency and locate the home page site for the rental car agency using the web browser. The web server receives an input from a web browser specifying the HTML template of a rental reservation form as the next output that needs to be sent back to the web browser. Once the user has input the information, the user submits the information by clicking on a "submit" button on the rental reservation form. At this point, the web server

application receives the data stream generated by the user request from the web browser. One suitable format picks out all variables and other relevant information data and sends it to a web server application in a post data stream format. The web server application examines the data stream from the web browser to determine what action should be taken to fulfill the user's request. The person or user who wants to rent a car will access the WWW by using a client workstation that is running a web browser and will enter the URL for the rental car agency and locate the home page site for the rental car agency. When the car rental reservation process model was initially built, the first activity program was identified and designated to run automatically whenever the car reservation process model was invoked. There will be multiple related activity programs that will work together to process the car rental request. Each individual activity program is a separate software module that is designated to accomplish a specific task or return some requested information. The person or user who wants to rent a car will access the WWW by using a client workstation that is running a web browser and will enter the URL for the rental car agency and locate the home page site for the rental car agency. By using HTML templates with substitution variables, a single relatively simple GCI module in conjunction with an FMIG can provide an effective interface between a web server and a plurality of software applications. This allows system operators to provide easily customizable web access to a plurality of software applications over the WWW. When the car rental reservation process model was initially built, the first activity program was identified and designated to run automatically whenever the car reservation process model was invoked. There will be multiple related activity programs

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that will work together to process the car rental request. Each individual activity program is a separate software module that is designated to accomplish a specific task or return some requested information. Brandt et al. and the prior art of record fail to teach or suggest locating the at least one predefined protocol process activity page in the predefined interface root directory path; that the workflow management system is being configured to assign the task to users and to monitor work performed on the tasks; and the predefined notification view control page is being configured to be issued when a task is not completed by a designated deadline. Brandt et al. in combination with Clicks, Jr. et al. (U.S. Patent 6,523,570) teach an apparatus for compiling a platform specific compiler that includes a set of user defined platform dependent compiler architecture descriptors that describe corresponding architectural features of a particular hardware platform. An architecture descriptor compiler converts the user defined platform dependent compiler architecture descriptors into the platform dependent compiler source code, which is converted into platform dependent object code by a host compiler. During run-time for the platform specific compiler, an interface mediates the flow of information between platform dependent compiler object code and platform independent compiler object code. Brandt et al. and Click, Jr. et al. and the prior art of record fail to teach or suggest the workflow management system is being configured to assign the task to users and to monitor work performed on the tasks; and the predefined notification view control page is being configured to be issued when a task is not completed by a designated deadline. Brandt et al. in combination with Click, Jr. et al. and further in combination with Boden et al. (U.S. Patent 5,930,512) teach

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FlowMark staff (person) definition entails identifying people at the enterprise to the FlowMark database and, for each person defined, specifying a level, an organization, and multiple roles. These attributes can be used at run time to dynamically assign activities to people with suitable attributes. A workflow server is accessed and executed on the Internet by: (1) starting the web browser; (2) pointing to a URL; (3) selecting from the browser a process to view, edit or execute; (4) if viewing, then browsing (examining) the process; (5) if editing, then browsing and modifying the process by selecting the process and running a script to modify the process; (6) if executing, then selecting the appropriate workflow server and process to execute; and (7) depending on the selected process definition, executing the selected workflow process. Brandt et al. and Click, Jr. et al. and Boden et al., in combination or alone and the prior art of record fail to teach or suggest that a predefined notification view control page is being configured to be issued when a task is not completed by a designated deadline.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- Click (EP 1,046,985 A2) discloses systems and methods for building a platform specific compiler in a multi-platform environment.

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[Informal/Draft communication, labeled "**PROPOSED**" or "**DRAFT**"]

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13 October 2005

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